

CLAIMS

1. A code conversion method for converting first code string data conforming to a first speech coding scheme into second code string data conforming to a second speech coding scheme, the method comprising the steps of:

5 decoding the first code string data to generate a first decoded speech;
 correcting signal characteristics of the first decoded speech to generate a second decoded speech; and
 encoding the second decoded speech in accordance with the second speech coding scheme to generate the second code string data.

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2. The code conversion method according to claim 1, wherein in the step of generating the second decoded speech, the signal characteristics are corrected by a filter having characteristics which vary in accordance with characteristics of the first decoded speech.

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3. The method according to claim 2, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech.

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4. The code conversion method according to claim 2 or 3, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter.

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5. The code conversion method according to claim 1, wherein in the step of generating the second decoded speech, the signal characteristics of the first decoded speech are corrected into signal characteristics suitable for re-encoding.

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6. The code conversion method according to claim 5, wherein in the step of generating the second decoded speech, the signal characteristics are corrected by a filter having characteristics which vary in accordance with characteristics of the first decoded speech.

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7. The method according to claim 6, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech.

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8. The code conversion method according to claim 6 or 7, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter.

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9. A code conversion apparatus for converting first code string data conforming to a first speech coding scheme into second code string data conforming to a second speech coding scheme, the apparatus comprising:
a speech decoding circuit for decoding the first code string data to
5 generate a first decoded speech;
a signal characteristic correcting circuit for correcting signal

characteristics of the first decoded speech to generate a second decoded speech; and

10 a speech encoding circuit for encoding the second decoded speech in accordance with the second speech coding scheme to generate the second code string data.

10. The code conversion apparatus according to claim 9, wherein the signal characteristic correcting circuit corrects the signal characteristics of the first decoded speech by a filter having characteristics which vary in accordance with characteristics of the first decoded speech.

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11. The code conversion apparatus according to claim 10, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first 5 decoded speech.

12. The code conversion apparatus according to claim 10 or 11, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter.

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13. The code conversion apparatus according to claim 9, wherein said signal characteristic correcting circuit corrects the signal characteristics of the first decoded speech into signal characteristics suitable for re-encoding to generate the second decoded speech.

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14. The code conversion apparatus according to claim 13, wherein the signal characteristic correcting circuit corrects the signal characteristics of the first decoded speech by a filter having characteristics which vary in accordance with characteristics of the first decoded speech.

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15. The code conversion apparatus according to claim 14, wherein the characteristics of the filter are varied using at least one of frame type information included in the first code string data, size of the first code string data, and a characteristic amount which can be calculated from the first decoded speech.

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16. The code conversion apparatus according to claim 14 or 15, wherein the filter is an inverse filter to a post filter, an emphasis filter having characteristics for emphasizing high-band components of frequency, or a filter which is a combination of the inverse filter and the emphasis filter.

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17. A program for causing a computer to execute the steps of:
decoding a first code string data conforming to a first speech coding scheme to generate a first decoded speech;
correcting signal characteristics of the first decoded speech to
5 generate a second decoded speech; and
encoding the second decoded speech in accordance with a second speech coding scheme to generate a second code string data conforming to the second speech coding scheme.

18. A program for causing a computer to execute the steps of:

decoding a first code string data conforming to a first speech coding scheme to generate a first decoded speech;

correcting signal characteristics of the first decoded speech using a

5 filter having characteristics which vary in accordance with characteristics of the first decoded speech to generate a second decoded speech; and

encoding the second decoded speech in accordance with a second speech coding scheme to generate a second code string data conforming to the second speech coding scheme.

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19. A program for causing a computer to execute the steps of:

decoding a first code string data conforming to a first speech coding scheme to generate a first decoded speech;

correcting signal characteristics of the first decoded speech into signal

5 characteristics suitable for re-encoding to generate a second decoded speech; and

encoding the second decoded speech in accordance with a second speech coding scheme to generate the second code string data conforming to the second speech coding scheme.

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20. A program for causing a computer to execute the steps of:

decoding a first code string data conforming to a first speech coding scheme to generate a first decoded speech;

correcting signal characteristics of the first decoded speech into signal

5 characteristics suitable for re-encoding, using a filter having characteristics which vary in accordance with characteristics of the first decoded speech, to generate a second decoded speech signal; and

encoding the second decoded speech in accordance with a second speech coding scheme to generate the second code string data conforming
10 to the second speech coding scheme.

21. A computer readable recording medium having stored thereon the program according to any one of claims 17 to 20.